

Remarks

Reconsideration of this Application is respectfully requested. Upon entry of the foregoing amendment, claims 39-66 are pending in the application, with claims 39 and 66 being the sole independent claims. Claims 22-38 are sought to be cancelled without prejudice to or disclaimer of the subject matter therein. New claims 49-66 are sought to be added. These changes are believed to introduce no new matter, and their entry is respectfully requested. Based on these amendments and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Rejection under 35 U.S.C. § 102(b)

In the Office Action, the Examiner has rejected claims 22-48 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,935,942 to Zeimer. Applicants respectfully traverse this rejection.

Zeimer does not qualify as prior art under 35 U.S.C. §102(b). The present application is a National Application filed in accordance with 35 U.S.C. §371 from International Application PCT/IB00/00274 (which designated the U.S.), filed on February 15, 2000. As a result, Zeimer (which issued on August 10, 1999) was not patented more than one year prior to Applicants' date of application as required by 35 U.S.C. §102(b). As a result, the rejection under §102(b) is improper and Applicants respectfully request that it be reconsidered and withdrawn.

Applicants further note that the present application claims priority under 35 U.S.C. §119 to United Kingdom application no. 9903394.6, filed February 15, 1999. Thus, the effective filing date of the present application is actually February 15, 1999, a date prior to issuance of the Zeimer patent.

Pending Claims are patentable over Zeimer

The sole rejection of claims 39-48 has been overcome. However, to the extent that the Examiner would apply Zeimer in a rejection of the claims under 35 U.S.C. §102(e), Applicants provide the following remarks.

The present invention employs the use of a photosensitizer chemical to destroy a neovascularization. In more detail, a photosensitizer is allowed to enter a "feeder vessel" and thus penetrate a neovascularization. Thereafter, the "feeder vessel," which has been carefully located in a separate or simultaneous step, is photocoagulated, and then (but only then) the photosensitizer chemical is activated. Hence, photocoagulation of the feeder vessel occurs prior to activation of the photosensitizer chemical.

In a preferred embodiment, activation of the photosensitizer chemical results in a photochemical and photothermal effect, which destroys the neovascularization. However, without further control, the photochemical and/or photothermal effect will damage healthy surrounding cells/tissues as well as the neovascularization. Thus, an important feature of the present invention resides in the first step of specific location and photocoagulation of a "feeder vessel," the result of which is that down-stream blood flow is substantially reduced. In contrast, blood flow up-stream of the feeder vessel coagulation point (and in other parallel blood vessels) remains substantially unaltered.

Accordingly, prior to activation, photosensitizer chemical is rapidly removed by natural blood flow from areas surrounding the neovascularization, but is retained in the feeder vessel and in the neovascularization down-stream of the point at which the feeder vessel has been photocoagulated. Thus, the present invention achieves a concentration of photosensitizer chemical in the region of the neovascularization. In addition, due to rapid dissipation by the normal blood flow, any photochemical/photothermal effect in surrounding cells or tissues is either negated or minimized. This protects such surrounding cells or tissues from the effects of activating the photosensitizer chemical.

These features of the invention are recited in independent claim 39. For example, claim 39 recites the steps of:

 permitting the photosensitizer chemical to enter the
 neovascularization;
 photocoagulating the feeder vessel . . . ; and
 after photocoagulating the feeder vessel, activating the
 photosensitizer chemical

At least these claimed steps are neither taught nor suggested by Zeimer.

Zeimer describes a method for treating a neovascularization in the eye of a patient. However, there is no teaching or suggestion in Zeimer of any method step (e.g., photocoagulation) that imposes a reduced blood flow within a target neovascularization prior to activation of a photosensitizer chemical within the neovascularization. In contrast to the claimed invention, occlusion of a feeder vessel in Zeimer is dependent upon activation of the photosensitizer chemical. That is, occlusion of the feeder vessel occurs after activation of the photosensitizer chemical. See Zeimer at column 4, lines 64-65, and column 9, lines 11-16.

Thus, Zeimer does not teach or suggest the separate photocoagulating and activating steps recited in claim 39. For at least this reason, claim 39 is patentable over Zeimer, and allowance of claim 39 is respectfully requested.

Claims 40-48 depend either directly or indirectly from independent claim 39. Thus, these dependent claims are patentable for at least the same reasons that claim 39 is patentable.

Claims 22-38 are sought to be cancelled by the above amendments. New claims 49-65 are sought to be added. New claims 49-65 correspond to cancelled claims 22-38. Each of the new claims 49-65 depends either directly or indirectly from claim 39. Thus, these new dependent claims are patentable for at least the same reasons that claim 39 is patentable.

New claim 66 is a new independent claim. Like claim 39, claim 66 recites separate photocoagulating and activating steps. Thus, claim 66 is patentable over the cited art for at least the same reasons that claim 39 is patentable. Favorable consideration and allowance of new claim 66 are respectfully requested.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will

expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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